

AMENDMENTS TO THE CLAIMS

Please **AMEND** claims 1-2, 4-14, and 18-24 as shown below.

Please **ADD** new claims 25-26 as shown below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An incoming message alarming system, comprising:
a wireless communication system for ~~transmitting~~ receiving an incoming message from
to a calling ~~called~~ mobile communication terminal, and ~~for transmitting a first notification~~
~~message including an identification of a calling mobile communication terminal base alarm~~
~~information including an identification of the calling mobile communication terminal;~~ and
a messenger service system for receiving the ~~first notification message base alarm~~
~~information~~ from the wireless communication system and ~~for sending a second notification~~
~~message incoming message alarming information indicating arrival of the incoming message to~~
a personal computer, ~~the second notification message for providing real-time notification of the~~
~~incoming message on which a messenger service program being logged by a subscriber of a~~
~~called mobile communication terminal is practiced,~~
wherein the incoming message represents voice communications or data
communications.

2. (Currently Amended) The incoming message alarming system of claim 1, wherein the
wireless communication system comprises:
a base station for receiving the incoming message ~~from the calling mobile~~
~~communication terminal;~~

a mobile switching center for ~~receiving the incoming message from the base station and~~ transmitting the first notification message ~~base alarm information~~ to the messenger service system; and

a home location register for storing location information of ~~[[the]]~~ a called subscriber corresponding to the called mobile communication terminal, subscriber information ~~[[on]]~~ representing whether or not the called subscriber is an incoming message alarming service subscriber, and flag information indicating an activation state of the incoming message alarming service.

3. (Cancelled)

4. (Currently Amended) The incoming message alarming system of claim 23, wherein the messenger server ~~asks the called subscriber whether to use the incoming message service and stores resultant use~~ information on whether to use ~~[[the]]~~ an incoming message alarming service ~~as use information~~ in the messenger information database.

5. (Currently Amended) The incoming message alarming system of claim 4, wherein ~~[[the]]~~ flag information stored in the wireless communication system and indicating an activation state of the incoming message alarming service is updated by the use information.

6. (Currently Amended) The incoming message alarming system of claim 5, wherein the messenger server transmits the second notification message ~~incoming message alarming~~ information to the personal computer ~~called subscriber, with reference to the flag information,~~ when the incoming message alarming service ~~has been~~ is activated.

7. (Currently Amended) The incoming message alarming system of claim 5, wherein the messenger server temporarily stores the second notification message ~~incoming message~~ ~~alarming information, with reference to the flag information,~~ when the incoming message alarming system service has is not been activated.

8. (Currently Amended) A wireless communication system, comprising:
a base station for receiving an incoming message from a calling mobile communication terminal; and
a mobile switching center for receiving the incoming message from the base station, for transmitting the incoming message to a called mobile communication terminal, and for transmitting a first notification message ~~base alarm information~~ to a messenger service system, wherein the messenger service system ~~receives the base alarm information, and then~~ sends a second notification message for providing real-time notification of the incoming message ~~incoming message alarming information indicating arrival of the incoming message to a personal computer on which a messenger service program being logged by a subscriber of a called mobile communication terminal is practiced.~~

9. (Currently Amended) The wireless communication system of claim 8, wherein information in the first notification message or the second notification message comprises an identification of the called mobile communication terminal ~~the base alarm information is and at least one of an~~ ~~identification~~ ~~of the called mobile communication terminal, if the incoming message is a call, and is at least one of identifications of a calling mobile communication terminal and the called mobile communication terminal, and the content of a short message, if the incoming message is the short message.~~

10. (Currently Amended) The wireless communication system of claim 8, wherein the mobile switching center temporarily stores the first notification message base alarm information when the base alarm information is not able to be transmitted to the messenger service system.

11. (Currently Amended) A messenger service system, comprising:

a messenger information database for storing an IP address and a messenger ID of a called subscriber; and

a messenger server for sending a second notification message incoming message alarming information to a personal computer on which a messenger service program being logged by the called subscriber is ~~on practicing~~ according corresponding to the IP address,

wherein the second notification message incoming message alarming information ~~indicates arrival~~ provides real-time notification of an incoming message transmitted ~~[[from]]~~ to a wireless communication system, and

wherein the wireless communication system comprises;

a base station for receiving the incoming message from a calling mobile communication terminal; and

a mobile switching center for receiving the incoming message from the base station and transmitting ~~[[the]]~~ a first notification message base alarm information to the messenger service system.

12. (Currently Amended) The messenger service system of claim 11, wherein the messenger server sends the second notification message is transmitted incoming message alarming information through the internet to the personal computer.

13. (Currently Amended) The messenger service system of claim 11, wherein the messenger server temporarily stores the second notification message ~~incoming message~~ ~~alarming information when the incoming message alarming information is not able to be sent to the called subscriber.~~

14. (Currently Amended) The messenger service system of claim 11, wherein information in the second notification message comprises an identification of a called mobile communication terminal corresponding to the called subscriber and the incoming message ~~alarming information is at least one of an identification of [[a]] the calling mobile communication terminal sending the incoming message and information indicating the incoming message's arrival, if the incoming message is a call, and is at least one of an identification of the calling mobile communication terminal and the content of a short message, if the incoming message is the short message.~~

15 - 17. (Cancelled).

18. (Currently Amended) A method for alarming an incoming message of a mobile communication terminal, comprising:

transmitting a first notification message ~~base alarm information~~ including an identification of a called mobile communication terminal ~~[[by]]~~ from a wireless communication system;

~~receiving the base alarm information and searching~~ determining an IP address corresponding to the identification of the called mobile communication terminal ~~by a messenger service system; and~~

providing real-time notification ~~alarming arrival~~ of the incoming message to a personal computer corresponding to the IP address ~~on which a messenger service program being logged~~

by a subscriber of a called mobile communication terminal is practicing, by the messenger service system.

19. (Currently Amended) The method of claim 18, wherein the step of said transmitting a first notification message base alarm information further comprises:

receiving ~~[[an]]~~ the incoming message from a calling mobile communication terminal;
and

~~checking whether or not the called subscriber is an incoming message alarming service subscriber;~~

~~if the called subscriber is an incoming message alarming service subscriber, determining an activation state of an checking whether or not the incoming message alarming service has been activated; and~~

~~if the incoming message alarming service has been activated, transmitting the base alarm information.~~

20. (Currently Amended) The method of claim 18, wherein the step of providing real-time notification said alarming arrival of the incoming message ~~to a called subscriber~~ comprises:

determining ~~checking whether or not~~ if a ~~[[the]]~~ called subscriber has logged in to an ~~incoming~~ the messenger alarming service on the personal computer program;

~~if the called subscriber has logged in the messenger service program, checking whether or not the called subscriber wants to use an incoming message alarming service;~~

~~if the called subscriber wants to use the incoming message alarming service,~~
~~transmitting the incoming message alarming information~~ a second notification message ~~to the personal computer which the called subscriber has logged in; and~~

~~creating displaying on the personal computer in real-time an incoming message alarming window indicating transmission of the incoming message[[s]] arrival to the called mobile communication terminal.~~

21. (Currently Amended) The method of claim 19, wherein the step of transmitting a first notification message ~~said transmitting base alarm information~~ further comprises:

~~if the incoming message alarming service has not been activated, temporarily storing the first notification message base alarm information until the incoming message alarming service is activated; and~~

~~when the incoming message alarming service is activated, transmitting the base alarm information.~~

22. (Currently Amended) The method of claim 20, wherein the step of transmitting a second notification message ~~said alarming arrival of the incoming message to the personal eomputer~~ further comprises:

~~if the incoming message alarming service has not been activated, temporarily storing the incoming message alarming information second notification message until the incoming message alarming service is activated; and~~

~~when the incoming message alarming service is activated, transmitting the incoming message alarming information to the personal computer.~~

23. (Currently Amended) The incoming message alarming system of claim 1, wherein the messenger service system comprises:

a messenger information database for storing an IP address and a messenger ID of a ~~[[the]]~~ called subscriber corresponding to the called mobile communication terminal; and

a messenger server for receiving the first notification message ~~base alarm information~~ from the wireless communication system and for sending the second notification message, ~~wherein incoming message alarming information to the personal computer according~~ corresponds to the IP address.

24. (Currently Amended) The messenger service system of claim 11, wherein the ~~messenger information database is located in the messenger server~~ includes the messenger information database.

25. (New) The wireless communication system of claim 9, wherein the first notification message or the second notification message further comprises a data message.

26. (New) The messenger service system of claim 14, wherein the second notification message further comprises a data message.